

balance for a solvent recovery system, whichever is later. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§ 63.4360, 63.4361, and 63.4362; results of liquid-liquid material balances conducted according to § 63.4351(d)(5); calculations according to § 63.4351 and supporting documentation showing that during the initial compliance period either the organic HAP overall control efficiency was equal to or greater than the applicable overall control efficiency limit in Table 1 to this subpart or the oxidizer outlet organic HAP concentration was no greater than 20 parts per million by weight (ppmw) on a dry basis; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by § 63.4364; and documentation of whether you developed and implemented the work practice plan required by § 63.4293.

(4) You do not need to comply with the operating limits for the emission capture system and add-on control device required by § 63.4292 until after you have completed the performance tests specified in paragraph (a)(1) of this section. Instead, you must maintain a log detailing the operation and maintenance of the emission capture system, add-on control device, and continuous parameter monitors during the period between the compliance date and the performance test. You must begin complying with the operating limits for your affected source on the date you complete the performance tests specified in paragraph (a)(1) of this section. This requirement does not apply to solvent recovery systems for which you conduct liquid-liquid material balances according to the requirements of § 63.4351(d)(5).

(b) *Existing sources.* For an existing affected source, you must meet the requirements of paragraphs (b)(1) through (3) of this section.

(1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in § 63.4283. Except for solvent recovery systems for which you conduct liquid-liquid material balances ac-

cording to § 63.4351(d)(5), you must conduct a performance test of each capture system and add-on control device according to the procedures in §§ 63.4360, 63.4361, and 63.4362, and establish the operating limits required by § 63.4292, within 180 days of the compliance date specified in § 63.4283. For a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.4351(d)(5), you must initiate the first material balance no later than the compliance date specified in § 63.4283.

(2) You must develop and begin implementing the work practice plan required by § 63.4293 no later than the compliance date specified in § 63.4283.

(3) You must complete the compliance demonstration for the initial compliance period according to the requirements of § 63.4351. The initial compliance period begins on the applicable compliance date specified in § 63.4283 and ends on the last day of the first full month after the compliance date. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§ 63.4360, 63.4361, and 63.4362; results of liquid-liquid material balances conducted according to § 63.4351(d)(5); calculations according to § 63.4351 and supporting documentation showing that during the initial compliance period the organic HAP overall control efficiency was equal to or greater than the applicable organic HAP overall control efficiency limit in Table 1 to this subpart or the oxidizer outlet organic HAP concentration was no greater than 20 ppmw on a dry basis and the efficiency of the capture system was 100 percent; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by § 63.4364; and documentation of whether you developed and implemented the work practice plan required by § 63.4293.

#### **§ 63.4351 How do I demonstrate initial compliance?**

(a) You may use the organic HAP overall control efficiency option or the oxidizer outlet organic HAP concentration option for any individual web coating/printing operation, for any

group of web coating/printing operations in the affected source, or for all of the web coating/printing operations in the affected source. You may include both controlled and uncontrolled web coating/printing operations in a group for which you use the organic HAP overall control efficiency option. You must use either the compliant material option, the emission rate without add-on controls option, or the emission rate with add-on controls option for any web coating/printing operation(s) in the affected source for which you do not use either the organic HAP overall control efficiency option or the oxidizer outlet organic HAP concentration option. To demonstrate initial compliance, any web coating/printing operation for which you use the organic HAP overall control efficiency option must meet the applicable organic HAP overall control efficiency limitations in Table 1 to this subpart according to the procedures in paragraph (d) of this section. Any web coating/printing operation for which you use the oxidizer outlet organic HAP concentration option must meet the 20 ppmw on a dry basis limit and achieve 100 percent capture efficiencies according to the procedures in paragraph (e) of this section. To demonstrate initial compliance with either option, you also must meet the applicable operating limits in § 63.4292 according to the procedures in paragraph (b) of this section and the work practice standards in § 63.4293 according to the procedures in paragraph (c) of this section. When calculating the organic HAP overall control efficiency according to this section, do not include any coating, printing, thinning, or cleaning materials applied on web coating/printing operations for which you use the compliant material option, the emission rate without add-on controls option, the emission rate with add-on controls option, or the oxidizer outlet organic HAP concentration option. You do not need to redetermine the mass of organic HAP in coating, printing, thinning, or cleaning materials that have been reclaimed onsite and reused in web coating/printing operation(s) for which you use the organic HAP overall control efficiency option.

(b) *Compliance with operating limits.* Except as provided in § 63.4350(a)(4), and except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4351(d)(5), you must establish and demonstrate continuous compliance during the initial compliance period with the operating limits required by § 63.4292, using the procedures specified in §§ 63.4363 and 63.4364.

(c) *Compliance with work practice requirements.* You must develop, implement, and document your implementation of the work practice plan required by § 63.4293 during the initial compliance period as specified in § 63.4312.

(d) *Compliance with organic HAP overall control efficiency limits.* You must follow the procedures in paragraphs (d)(1) through (7) of this section to demonstrate compliance with the applicable organic HAP overall control efficiency limit in Table 1 to this subpart.

(1) *Determine the mass fraction of organic HAP and mass of coating or printing materials.* Follow the procedures specified in § 63.4331(a)(1) and (3) to determine the mass fraction of organic HAP and mass of each coating, printing, thinning, and cleaning material applied during the compliance period.

(2) *Calculate the total mass of organic HAP emissions before add-on controls.* Using Equation 1 of § 63.4331, calculate the total mass of organic HAP emissions before add-on controls from all coating, printing, thinning, and cleaning materials applied during the compliance period minus the organic HAP in certain waste materials in the web coating/printing operation or group of web coating/printing operations for which you use the organic HAP overall control efficiency option.

(3) *Calculate the organic HAP emissions reductions for each controlled web coating/printing operation.* Determine the mass of organic HAP emissions reduced for each controlled web coating/printing operation during the compliance period. The emissions reductions determination quantifies the total organic HAP emissions that pass through the emission capture system and are destroyed or removed by the add-on control device. Use the procedures in paragraph (d)(4) of this section to calculate

the mass of organic HAP emissions reductions for each controlled web coating/printing operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances. For each controlled web coating/printing operation using a solvent recovery system for which you conduct a liquid-liquid material balance, use the procedures in paragraph (d)(5) of this section to calculate the organic HAP emissions reductions.

(4) *Calculate the organic HAP emissions reductions for controlled web coating/printing operations not using liquid-liquid material balance.* For each controlled web coating/printing operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances, calculate the organic HAP emissions reductions using Equation 1 of § 63.4341. The equation applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coating, printing, thinning, and cleaning materials applied in the web coating/printing operation served by the emission capture system and add-on control device during the compliance period. For any period of time a deviation specified in § 63.4352(c) or (d) occurs in the controlled web coating/printing operation, including a deviation during startup, shutdown, or malfunction, then you must assume zero efficiency for the emission capture system and add-on control device. Equation 1 of § 63.4341 treats the coating, printing, thinning, and cleaning materials applied during such a deviation as if they were applied on an uncontrolled web coating/printing operation for the time period of the deviation.

(i) Calculate the total mass of organic HAP in the coating and printing material(s) applied in the controlled web coating/printing operation during the compliance period, kg, using Equation 1A of § 63.4341.

(ii) Calculate the total mass of organic HAP in the thinning and cleaning materials applied in the controlled web coating/printing operation(s) dur-

ing the compliance period, kg, using Equation 1B of § 63.4341.

(iii) Calculate the mass of organic HAP in the coating, printing, thinning, and cleaning materials applied in the controlled web coating/printing operation during deviations specified in § 63.4352(c) and (d), using Equation 1C of § 63.4341.

(5) *Calculate the organic HAP emissions reductions for controlled web coating/printing operations using liquid-liquid material balance.* For each controlled web coating/printing operation using a solvent recovery system for which you conduct liquid-liquid material balances, calculate the organic HAP emissions reductions by applying the volatile organic matter collection and recovery efficiency to the mass of organic HAP contained in the coating, printing, thinning, and cleaning materials applied in the web coating/printing operation controlled by the solvent recovery system during the compliance period. Perform a liquid-liquid material balance for the compliance period as specified in paragraphs (d)(5)(i) through (vi) of this section.

(i) For each solvent recovery system, install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile organic matter recovered by the solvent recovery system for the compliance period. The device must be initially certified by the manufacturer to be accurate to within  $\pm 2.0$  percent of the mass of volatile organic matter recovered.

(ii) For each solvent recovery system, determine the mass of volatile organic matter recovered for the compliance period, kg, based on measurement with the device required in paragraph (d)(5)(i) of this section.

(iii) Determine the mass fraction of volatile organic matter for each coating and printing material applied in the web coating/printing operation controlled by the solvent recovery system during the compliance period, kg volatile organic matter per kg coating and printing material. You may determine the volatile organic matter mass fraction using Method 24 of 40 CFR part 60, appendix A, or an EPA approved alternative method, or you may use information provided by the manufacturer

or supplier of the coating or printing material. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of Method 24 of 40 CFR part 60, appendix A, or an approved alternative method, the test method results will govern.

(iv) Measure the mass of each coating, printing, thinning, and cleaning material applied in the web coating/printing operation controlled by the solvent recovery system during the compliance period, kg.

(v) For the compliance period, calculate the solvent recovery system's volatile organic matter collection and

recovery efficiency using Equation 2 of § 63.4341.

(vi) Calculate the mass of organic HAP emissions reductions for the web coating/printing operation controlled by the solvent recovery system during the compliance period, using Equation 3 of § 63.4341.

(6) *Calculate the organic HAP overall control efficiency.* Determine the organic HAP overall control efficiency, kg organic HAP emissions reductions per kg organic HAP emissions before add-on controls during the compliance period, using Equation 1 of this section.

$$E_{\text{HAP}} = \frac{\sum_{i=1}^q (H_{\text{C},i}) + \sum_{j=1}^r (H_{\text{CSR},j})}{H_e} \times 100 \quad (\text{Eq. 1})$$

Where:

$E_{\text{HAP}}$  = Organic HAP overall control efficiency for the compliance period, kg organic HAP emissions reductions per kg organic HAP emissions before add-on controls during the compliance period.

$H_{\text{C},i}$  = Total mass of organic HAP emissions reductions for controlled web coating/printing operation,  $i$ , during the compliance period, kg, from Equation 1 of § 63.4341.

$H_{\text{CSR},j}$  = Total mass of organic HAP emissions reductions for controlled web coating/printing operation,  $j$ , during the compliance period, kg, from Equation 3 of § 63.4341.

$H_e$  = Total mass of organic HAP emissions before add-on controls from all the coating, printing, thinning, and cleaning materials applied during the compliance period, kg, determined according to paragraph (d)(2) of this section.

$q$  = Number of controlled web coating/printing operations except those controlled with a solvent recovery system.

$r$  = Number of web coating/printing operations controlled with a solvent recovery system.

(7) *Compliance demonstration.* To demonstrate initial compliance with the organic HAP overall control efficiency in Table 1 to this subpart, the organic HAP overall control efficiency calculated using Equation 1 of this section must be at least 98 percent for new or

reconstructed affected sources and at least 97 percent for existing affected sources. You must keep all records as required by §§ 63.4312 and 63.4313. As part of the Notification of Compliance Status required by § 63.4310, you must identify the web coating/printing operation(s) for which you used the organic HAP overall control efficiency option and submit a statement that the web coating/printing operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP overall control efficiency was greater than or equal to the applicable organic HAP overall control efficiency in Table 1 to this subpart, and you achieved the operating limits required by § 63.4292 and the work practice standards required by § 63.4293.

(e) *Compliance with oxidizer outlet organic HAP concentration limit.* You must follow the procedures in paragraphs (e)(1) through (3) of this section to demonstrate compliance with the oxidizer outlet organic HAP concentration limit of no greater than 20 ppmw on a dry basis.

(1) *Install and operate a PTE.* Install and operate a PTE around each work station and associated drying or curing

oven in the web coating/printing operation. An enclosure that meets the requirements in § 63.4361(a) is considered a PTE. Route all organic HAP emissions from each PTE to an oxidizer.

(2) *Determine oxidizer outlet organic HAP concentration.* Determine oxidizer outlet organic HAP concentration through performance tests using the procedures in § 63.4362(a) and (b).

(3) *Compliance demonstration.* To demonstrate initial compliance with the oxidizer outlet organic HAP concentration limit in Table 1 to this subpart, the oxidizer outlet organic HAP concentration must be no greater than 20 ppmv on a dry basis and the efficiency of the capture system must be 100 percent. You must keep all records as required by §§ 63.4312 and 63.4313. As part of the Notification of Compliance Status required by § 63.4310, you must identify the web coating/printing operation(s) for which you used the oxidizer outlet organic HAP concentration option and submit a statement that the web coating/printing operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the oxidizer outlet organic HAP concentration was no greater than 20 ppmv on a dry basis, the efficiency of the capture system was 100 percent, and you achieved the operating limits required by § 63.4292 and the work practice standards required by § 63.4293.

**§ 63.4352 How do I demonstrate continuous compliance with the emission limitations?**

(a) You must meet all the requirements of this section to demonstrate continuous compliance with the organic HAP overall control efficiency. The organic HAP overall control efficiency for each compliance period, determined according to the procedures in § 63.4351(d), must be equal to or greater than the applicable organic HAP overall control efficiency limit in Table 1 to this subpart. Each month following the initial compliance period described in § 63.4350 is a compliance period. You must perform the calculations in § 63.4351(d) on a monthly basis. You must meet the applicable requirements of paragraphs (c) through (j) of this section to demonstrate continuous

compliance with the oxidizer outlet organic HAP concentration limit.

(b) If the organic HAP overall control efficiency for any compliance period failed to meet the applicable organic HAP overall control efficiency in Table 1 to this subpart, this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§ 63.4310(c)(6) and 63.4311(a)(7).

(c) You must demonstrate continuous compliance with each operating limit required by § 63.4292 that applies to you, as specified in Table 2 to this subpart.

(1) If an operating parameter is out of the allowed range specified in Table 2 to this subpart, this is a deviation from the operating limit that must be reported as specified in §§ 63.4310(c)(6) and 63.4311(a)(7).

(2) If an operating parameter deviates from the operating limit specified in Table 2 to this subpart, then you must assume that the emission capture system and add-on control device were achieving zero efficiency during the time period of the deviation. For the purposes of completing the compliance calculations specified in § 63.4351(d)(4), you must treat the coating, printing, thinning, and cleaning materials applied during a deviation on a controlled web coating/printing operation as if they were applied on an uncontrolled web coating/printing operation for the time period of the deviation as indicated in Equation 1 of § 63.4341.

(d) You must meet the requirements for bypass lines in § 63.4364(b) for controlled web coating/printing operations for which you do not conduct liquid-liquid material balances. If any bypass line is opened and emissions are diverted to the atmosphere when the web coating/printing operation is running, this is a deviation that must be reported as specified in §§ 63.4310(c)(6) and 63.4311(a)(7). For the purposes of completing the compliance calculations specified in § 63.4351(d)(4), you must treat the coating, printing, thinning, and cleaning materials applied during a deviation on a controlled web coating/printing operation as if they were applied on an uncontrolled web coating/printing operation for the time period of the deviation as indicated in Equation 1 of § 63.4341.